

F-35 Lightning II Program

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Hill Airmen, Aircraft Progress Together as F-35A Program Matures

388th Fighter Wing Public Affairs

HILL AIR FORCE BASE, Utah -- Two years after the Air Force declared IOC for the F-35A, pilots and maintainers at Hill's active duty 388th and reserve 419th Fighter Wings are steadily erasing the word "initial" from in front of "operational capability."

Since the IOC announcement on Aug. 2, 2016, Airmen and the jet have grown together during deployments to Europe and Asia, several combat exercises, weapons evaluations and daily operations.

"We've seen an exponential increase in capability," said Lt. Col. Yosef Morris, commander of the 4th Fighter Squadron and former director of operations for 34th FS, the first operational F-35 unit. "At IOC, the jet was very capable doing a very limited mission set. Now we have our full inventory of weapons, and we routinely train against high-end threats."



Airmen assigned to the 388th Aircraft Maintenance Squadron prepare F-35A Lightning II aircraft for flight at Hill Air Force Base.

Similar to a consumer with a new product, at IOC the 388th and 419th were exploring and developing just how to use the aircraft, "now we're really codifying and establishing exactly what we can do," Morris said.

The release of new software in February, known as "3F," drove much of the increase in capability.

In addition to the weapons package, the flight envelope was expanded to 9 Gs, targeting, mapping, and the fusion of all those systems was improved.

The F-35 is now more fully multi-role, Morris says. Stealth capabilities allow pilots to fly into "contested" airspace undetected, take out advanced surface to air threats and secure the area. Then they can be a "pack mule," load weapons externally "more than the F-16 ever could," taking out ground targets as they operate freely and support troops in combat.

"I spent nine years flying the F-15 Strike Eagle. That is a very, very capable aircraft. I've taken it to combat and it brought me back," said Lt. Col. Michael Albrecht, 388th FW director of staff and an F-35 pilot since 2011. "I would rather have flown the F-15 than the F-35 prior to IOC. After IOC, if I had to go to combat, I would want the F-35. Today, there's absolutely no question."

Albrecht, who spent time in an advisory role at Air Combat Command during the F-35's development, said that lethality and survivability are only going to increase as technology and tactics continue to advance.

"When the Air Force developed their requirements for the F-35, they 'bet the ragged edge' of technology," Albrecht, said. "That extremely advanced technology may not have been fully realized back then, which led to a lot of the bad press that has been regurgitated. Now that the technology is coming to fruition and is fully realized, the bet is paying off."

Another boost to the program has been fresh blood and new eyes. Current technology meshes well with young pilots and maintainers, Albrecht said. A group of pilots who haven't flown anything but the F-35, have been flying at Hill for nearly a year.

"It's like handing my kids an IPhone and they use it and show me all kinds of things I didn't know I could do," Albrecht said. "It's so intuitive for these young pilots because they've grown up with technology. They are going to be able to get the most out of the jet."

With the F-35, maintenance has also moved into the digital age.

"The fifth-gen technology really fits with the new crop of maintainers. They are able to grasp concepts and they're very technically proficient. The aircraft is growing up with young Airmen who have grown up in a digital age," said Chief Master Sgt. Eric Engel, superintendent of the 466th Aircraft Maintenance Unit, a reservist who works with the 34th Aircraft Maintenance Unit.

Maintainers are working hard to push the boundaries. They have practiced rapidly deploying, refueling and rearming the F-35 at remote airfields with a small support "footprint." They have trained with the Marines to launch F-35B sorties while the Marines launched F-35A sorties. These are just two of more than a dozen initiatives Airmen are using to expand the F-35's combat capability.

"Our leadership is very aware that we're the first and in large part, how we do things will be the blueprint for everyone who follows. We're pushing ourselves and the jet," Engel said. "Deployments and exercises reinforce what we think. Until you take it somewhere and prove it, it's just a thought."

This week, maintainers will launch forty sorties a day for four days straight without building any down time into the flying schedule. Historically, on legacy aircraft and the F-35, maintenance losses are built into the schedule to account for any issues.

"We haven't done this before and we wouldn't even be trying it if we didn't have the confidence in the jet. The data we have backs us up," Engel said.

Looking back over the advances of the past two years and the jet they operate now, has Airmen interested to see what the future holds for the F-35 and Airmen.

"In the time that they snapped the chalk line on the F-35 to the time it was delivered, new technology and updates have happened inside and outside of the F-35 world," said Albrecht. "We're going to continue to see those advances come into the F-35 in addition to the planned upgrades."

Hill AFB is slated to be home to three operational F-35A fighter squadrons with a total of 78 aircraft by the end of 2019. The first operational F-35As arrived at Hill in September 2015. The active duty 388th FW and Air Force Reserve 419th FW will fly and maintain the jet in a Total Force partnership, which capitalizes on the strength of both components.